High Mountain Dams in Bonneville Unit,
Washington Lake Dam
Wasatch National Forest
1.0 miles southwest of Trial Lake Campground
Kamas vicinity
Summit County
Utah

HAER No. UT-41-N

HAER
UTAH,
22-KAM.V,
1-N-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
U.S. Department of the Interior
P.O. Box 25287
Denver, Colorado 80537

HAER
UTAH,
22-KAM.V,
1-N-

HISTORIC AMERICAN ENGINEERING RECORD

High Mountain Dams in Bonneville Unit, Water Lily Lake Dam

HAER No. UT-41-N

Location:	1.0 miles southwest of Trial Lake Campground, Wasatch National Forest, Kamas vicinity, Summit County, Utah UTM: 12.502700.4502520 Quad: Mirror Lake
Date of Construction:	1914
Builder/Designer:	Provo Reservoir Company and Sego Irrigation Company, Provo, Utah Wasatch Irrigation Company and Timpanogos Irrigation Company, Heber City, Utah
Present Owner:	Union Reservoir Company, Heber City, Utah 84032
Original Use:	Dam
Present Use:	Dam
Significance:	Washington Lake is the largest body of water to be reservoired in the Bonneville Unit of the Central Utah Project. Its dam, built cooperatively by four of the principal regional irrigation companies, is the oldest man-made structure to impound a natural lake in the upper Provo River drainage, along with the dams on Trial and Washington lakes. Although standard in its sloped profile and steel outlet works, the dam is technologically notable as having a concrete core beneath its earth-fill construction. An easily accessible structure with high visibility, Washington is one of the most significant of the Bonneville Unit dams.
Inventoried by:	Clayton Fraser and James Jurale Fraserdesign Loveland, Colorado October 17, 1985

HISTORICAL INFORMATION

A deep body of water with a gently sloping shoreline covered with conifers, Washington Lake is the largest and most accessible of the fifteen reservoired lakes in the upper Provo River drainage. In May 1914, the National Forest Service granted permission to the Provo Reservoir Company and the Sego Irrigation Company of Provo, Utah, and the Wasatch and Timpanogos irrigation companies of Heber City, Utah, to dam Washington and four other lakes in the area for irrigation water storage. The Washington Lake Dam was completed later that year. Seven hundred feet long and 42 feet high, the dam consisted of compacted earth fill over a concrete core, with 18" of stone riprap on its sloped upstream and downstream faces. The outlet was a 20" diameter riveted steel pipe, with a slide headgate at the pipe inlet and a 20" Ludlow gate valve on the downstream toe. The dam and outlet works remain in good condition. It is proposed that the existing spillway be deepened, the dam reconfigured, and a new spillway be built to return the lake to its natural level.

ARCHITECTURAL INFORMATION

Dam length:	700 feet
Dam height:	42 feet
Dam width:	18 feet
Construct:	Earth fill dam with stone riprap facing
Lake size:	118.6 acres; 3,035 acre-foot maximum capacity; 32 vertical foot maximum drawdown
Outlet:	Gated 20" steel pipe; 10 x 12' concrete weir spillway

BIOGRAPHICAL INFORMATION

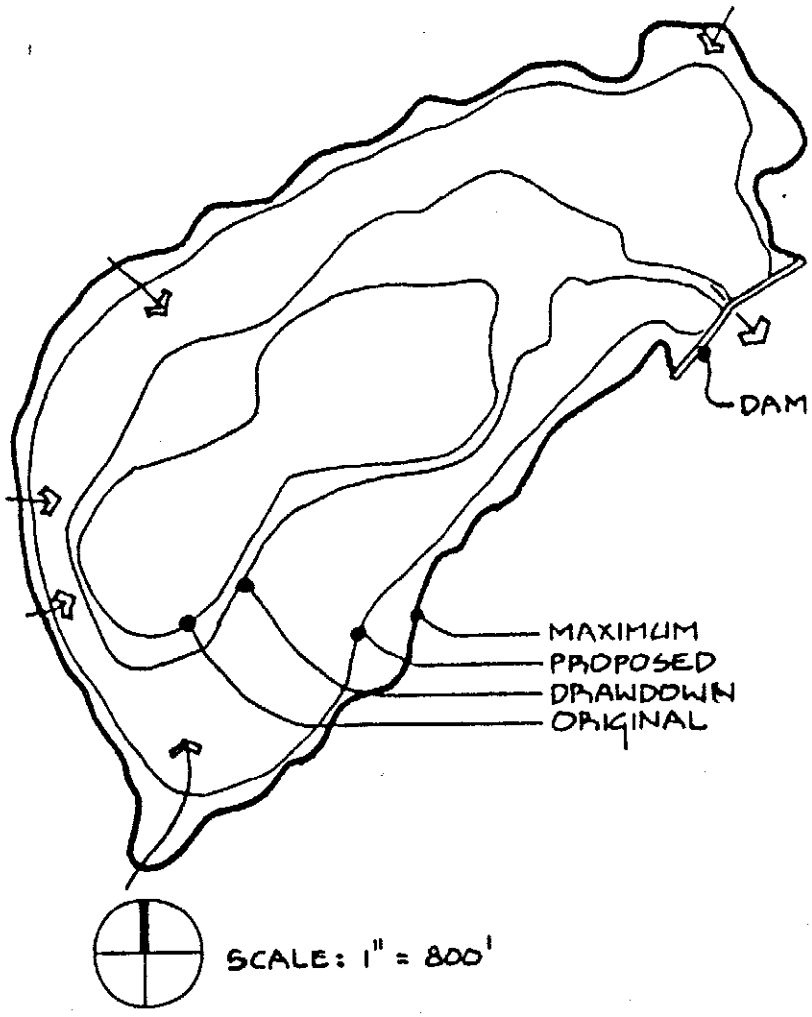
"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Provo River Drainage" National Forest Service Report, 1969, page 67.

Washington Lake Reservoir File #16-L, Kamas Ranger Station, Wasatch National Forest, Kamas, Utah

E. W. Kramer, "District Engineer's Report on the Applications of the Provo, Timpanogos, Wasatch and Sego Irrigation Companies," Salt Lake City, 1915, Provo Reservoir Company Files, W-CNFSO, Federal Building, Salt Lake City, Utah.

Field inspection by Clayton Fraser, July 23, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.


DAM
MAXIMUM
PROPOSED
DRAWDOWN
ORIGINAL
SCALE: 1" = 800'